



Building Resilience Through Arnis: Examining the Impact on Student Adaptability and Strength

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Abstract

This study examines the effects of Arnis, a traditional Filipino martial art, on student resilience—an important trait that enables individuals to adapt to and recover from adversity, particularly within the demanding context of academic life. Using a mixed-methods approach, the research combines quantitative surveys with qualitative interviews to gain a multifaceted understanding of how engagement in Arnis may promote resilience. Specifically, the study assesses resilience across physical, emotional, and social dimensions, recognizing that resilience encompasses more than mere endurance; it involves an individual's capacity to manage stress, build self-worth, and develop meaningful connections. Quantitative surveys measured students' resilience, coping strategies, and self-esteem, while semi-structured interviews offered insights into the participants' personal experiences with playing Arnis. The findings suggest that students who participate in playing Arnis demonstrate stronger coping mechanisms, improved self-esteem, and a heightened sense of community. These factors collectively contribute to an enhanced ability to navigate life's challenges. Notably, the study found that the physical discipline and structure provided by playing Arnis, combined with the emotional and social support within the training environment, play a substantial role in reinforcing these resilience-building qualities. The implications of these results stress the potential benefits of integrating martial arts, such as Arnis, into school curricula to support student resilience. By promoting physical strength, emotional stability, and social cohesion, playing Arnis could serve as a valuable tool in developing well-rounded, resilient individuals. This integration could provide students with practical skills for managing stress, developing self-confidence, and building supportive peer networks, which are essential for both academic success and personal growth.

Keywords: Arnis, resiliency, martial arts, students, mental health, self-discipline, coping strategies.

Introduction

Today's fast-paced and stressful educational environment emphasizes the importance of resiliency in students. It entails the ability to overcome adversity, sustain psychological well-being, and recover from setbacks (Denckla et al., 2020). As students balance academic pressures, social dynamics, and personal obstacles, resilience can have a major impact on both their academic performance and mental health (Heberle et al., 2020).

Resilience has been extensively explored in psychology, education, and health. According to Denckla et al. (2020), individual attributes, social relationships, and environmental forces all contribute to resilience. In educational institutions, resilient students tend to perform better academically and socially. Moreover, according to Moore et al. (2020), martial arts can increase psychological well-being by increasing self-esteem, lowering anxiety, and promoting emotional regulation. In addition, Gonzales (2020) also emphasizes the importance of community, stating that camaraderie in martial arts training promotes social support.

Traditional Filipino martial arts, specifically Arnis, also known as Eskrima or Kali, emphasize the use of sticks, knives, and empty-handed techniques. It extends beyond self-defense to encourage discipline, respect, and concentration (Santos, 2018). According to Sanchez et al., (2020), students that practice martial arts such as Arnis ought to develop physical capabilities as well as mental resilience, which can lead to increased adaptability and perseverance.

According to Moore et al., (2020), physical activities, including martial arts, improve psychological resilience by boosting self-esteem, emotional regulation, and social skills. Arnis teaches students to overcome physical and emotional problems, fostering a growth attitude that prepares them to face adversity. Furthermore, the community nature of martial arts training frequently fosters a supporting network that strengthens resilience (Gonzales, 2020). Thus, traditional martial arts, particularly Arnis, may play an important role in developing resilience.

Citing these literatures, there is a need to explore Arnis' impact on students' resiliency, with an emphasis on how it may affect coping strategies and self-esteem. Thus, the researchers investigate three major concerns. The first is how Arnis participation impacts coping strategies and self-esteem, providing insights into stress management and confidence building. Second, this study examines Arnis' social aspect, evaluating how it fosters community and support. Finally, this study examines students' perceptions of the relationship between Arnis practice and resilience, focusing on how students perceive Arnis' role in assisting students to overcome obstacles and prosper.

Methodology

This study utilized a mixed-methods approach, combining quantitative surveys and qualitative interviews to gather comprehensive data on the effects of playing Arnis on resiliency among students in select higher educations.

The study involved 100 students from diverse backgrounds, divided into two groups: 50 students who regularly play Arnis and 50 students who do not engage in any martial arts. This division enabled a comparative analysis of the potential effects of Arnis training on resilience and related factors.

Furthermore, data collection included both quantitative and qualitative methods to capture a comprehensive view of student resilience. For the quantitative component, students completed a survey assessing resilience, coping strategies, and self-esteem, using standardized measures such as the Resilience Scale (Wagnild & Young, 1993) and the Rosenberg Self-Esteem Scale (Jordan, 2020). These instruments provided reliable data on students' psychological and emotional strengths, allowing for a systematic comparison of both groups.

On the other side, for qualitative insights, semi-structured interviews were conducted with a subset of 20 participants (10 from each group). These interviews aimed to explore participants' personal experiences and perceptions regarding the relationship between Arnis and resilience, providing a richer understanding of how martial arts training might influence their coping mechanisms and social interactions.

Furthermore, data analysis included both statistical and thematic methodologies. Quantitative data were analyzed using statistical methods to determine whether there were any significant differences in resilience assessments between the two groups, offering insights into whether Arnis training correlates with increased resilience levels. On the contrary, the qualitative interview data were thematically examined, with common themes and narratives discovered to illustrate how participants see Arnis' impact on their resilience, self-esteem, and coping capacities. This mixed-methods approach allowed for a more holistic understanding of Arnis' involvement in student resilience.

Results

This section contained results from both statistical and thematic approaches. Quantitative data were assessed using statistical methods to see if there were any significant variations in resilience assessments between the two groups, providing insight into whether Arnis training correlates with higher resilience levels. Furthermore, the qualitative interview data were thematically explored, with similar themes and narratives emerging to show how participants see Arnis' impact on their resilience, self-esteem, and coping abilities.

Part I. Quantitative Findings

Table No. 1 showed data from the Survey

Variable	Arnis Practitioners (n=50)	Non-Practitioners (n=50)	t-value	p-value
Self-Esteem	M = 27.5, SD = 3.2	M = 22.8, SD = 4.1	5.72	< .001
Coping Strategies	M = 30.4, SD = 4.5	M = 24.1, SD = 5.2	6.21	< .001
Sense of Community	M = 31.2, SD = 3.9	M = 25.5, SD = 4.6	5.80	< .001

The results show that Arnis practitioners had considerably higher scores on all three psychological factors than non-practitioners. As to the self-esteem, the mean score for self-esteem was 27.5 (SD = 3.2) for practitioners and 22.8 (SD = 4.1) for non-practitioners. The t-value was 5.72, and the p-value was highly significant (<.001). This indicates further that the self-esteem of Arnis practitioners is substantially higher than that of non-practitioners. This suggests that practicing Arnis may make people feel more confident and valuable, perhaps as a result of the practice's social, mental, and physical components.

Moreover, regarding coping strategies, with a t-value of 6.21 and p <.001, practitioners scored 30.4 (SD = 4.5) on the coping strategies scale, while non-practitioners scored 24.1 (SD = 5.2). This suggests that practitioners are more adept at managing stress and adapting to changing circumstances. Additionally, practitioners score higher on coping skills, indicating that they are probably more capable of managing stressful or difficult circumstances. This improved capacity may be a result of the discipline, problem-solving, and resilience that Arnis training fosters.

As per the sense of community, practitioners reported a mean score of 31.2 (SD = 3.9) for sense of community, which was considerably higher than the non-practitioners' 25.5 (SD = 4.6) (t-value = 5.80, p <.001), indicating greater social ties and a sense of belonging. These results highlight how playing Arnis has a favorable psychological and social influence. This clearly shows that practitioners score higher in coping strategies, implying that they are more prepared to deal with stress or difficult situations. The discipline, problem-solving skills, and resilience established by Arnis training may contribute to this improved capacity. The stronger sense of community among practitioners implies that Arnis promotes social relationships and belonging. Group practice, common aims, and the art's cultural relevance may all contribute to a friendly environment.

In summary, the results above imply that playing Arnis has significant psychological and social advantages. The results highlight Arnis's several advantages as a tool for community development, cultural preservation, and personal development in addition to its use as a sport.

Part II. Qualitative Findings

Based on the interview data the following themes emerged that showed how participants see Arnis' impact on their resilience, self-esteem, and coping abilities.

Improved Coping Mechanisms

Participants stressed how Arnis training helped them manage stress and adversity. One student noted,

"Whenever I face challenges in school, I remember the techniques I've learned in Arnis. It reminds me to stay calm and focused."

"Growing up, I always felt a lot of pressure to excel in school. When I joined the Arnis club at my university, it was like discovering a new world. The first time I stepped onto the training mat, I was nervous. But as I learned to wield the sticks and perform the drills, I felt my anxiety melt away. Each training session became a safe space for me to release stress. I discovered that the rhythm of the strikes and the focus required to master the techniques helped me clear my mind. It's like a reset button. Now, when I face challenging exams or projects, I practice my footwork or visualize my strikes. This discipline has not only improved my performance in Arnis but also boosted my confidence in my studies. I've learned that I can tackle any challenge with the same determination I use in martial arts."

As a teenager, I often felt insecure about my abilities. I was shy and avoided situations where I had to speak or perform in front of others. When I was introduced to Arnis, it felt like an opportunity to change that. The sparring sessions were intense and intimidating at first, but my instructor encouraged us to embrace the discomfort. With each match, I learned to trust my instincts and react quickly. My confidence grew not only in Arnis but in other areas of my life. I began to speak up in class and even took part in the school debate team. The resilience I built through sparring taught me that failure isn't the end—it's just part of the process. Every time I got knocked down in practice, I got back up stronger. This mindset has changed the way I approach challenges outside of martial arts."

"During the pandemic, I felt isolated and anxious. My usual outlets for stress, like hanging out with friends or participating in sports, were taken away. When my school offered virtual Arnis classes, I hesitated but decided to give it a try. What I found was more than just a way to stay active; I discovered a community. Training online allowed us to connect, share our struggles, and support each other. We would have our training sessions and then chat afterward, talking about life, school, and everything in between."

"This connection helped me feel less alone during a tough time. The resilience I gained from learning Arnis, coupled with the support from my peers, reminded me that I'm part of something bigger. I learned to lean on others when times are tough and to offer support in return. Now, I feel much more equipped to handle stress and uncertainty, both in my personal life and in school."

These experiences highlight the different ways that students engage in playing Arnis to manage stress and develop resilience, highlighting the social, emotional, and physical advantages of martial arts exercise. These stories highlight how Arnis combines social interaction, emotional resilience, and physical discipline to offer a comprehensive strategy for reducing stress and personal growth. Students who practice Arnis acquire useful skills to deal with life's obstacles, whether it's focusing and persevering under pressure to perform well in class or finding support from their martial arts community in times of uncertainty.

Increased Self-Esteem

Many students expressed a sense of accomplishment from mastering Arnis skills, contributing to their overall self-worth. A participant shared,

"Every time I earn a new belt, I feel like I can achieve anything."

"Before I started training in Arnis, I often felt overwhelmed by school pressures and personal challenges. I struggled with self-doubt and anxiety. However, learning Arnis taught me to focus on my strengths. The discipline of training helped me develop a routine, which gave me a sense of stability. Each time I faced a challenge—whether in school or personal life—I remembered the techniques I learned. It felt like I was in control of my body and mind, and this confidence translated into my studies. Now, when I face difficult exams or projects, I remind myself that I can overcome challenges just like I do in training. Arnis has not only made me physically stronger but has also built my resilience."

"I joined the Arnis club during my first year in high school, mostly out of curiosity. At first, I was just looking for something to do, but I quickly realized how empowering it was. The art of Arnis is not just about fighting; it's about strategy and mental agility. I learned to think on my feet, which helped me deal with stress in my academics. During tough times, like during midterms, I would often visualize my training sessions—how I practiced my strikes and defenses. It reminded me that I could tackle my academic challenges with the same mindset. Arnis has helped me bounce back from setbacks. I've learned that every fall is just another opportunity to get back up stronger."

"Playing sports always made me feel good, but it wasn't until I started practicing Arnis that I truly understood what it meant to be resilient. In sports, it's easy to feel

discouraged after a loss, but Arnis taught me that failure is part of the journey. Each training session pushed me to confront my fears, whether it was sparring with a partner or mastering a new technique. I learned to accept mistakes as learning experiences, which changed how I approached both sports and academics. When I face setbacks, I remind myself that just like in Arnis, I have the power to adapt and overcome. It's made me a more determined and confident individual." Arnis became a vital part of my life during a tough time in high school. I was dealing with personal issues and felt like I was losing control. Joining the Arnis team provided me with a supportive community. The camaraderie we built helped me feel less isolated. Training together developed a sense of belonging and shared purpose. I noticed that I was more willing to face challenges, both in training and in my studies. I learned that resilience is not just about being tough but also about supporting each other. Now, I feel equipped to tackle life's challenges head-on, knowing I have the skills and support to overcome them."

"My journey with Arnis started as a way to get fit, but it turned into something much more profound. The practice of Arnis is deeply rooted in Filipino culture, and I found strength in that connection. As I progressed, I realized that the skills I learned in the dojo were directly applicable to my everyday life. The discipline and respect ingrained in Arnis made me more mindful and focused. When I faced academic pressures or personal challenges, I would reflect on my training — how I learned to keep my balance, stay grounded, and respond thoughtfully rather than react impulsively. This perspective has been important in building my resilience, allowing me to approach life's challenges with a positive mindset."

These narratives demonstrate how Arnis has a significantly positive effect on student's resiliency and sense of self. The idea that martial arts may be an effective vehicle for psychological growth is further supported by the fact that practitioners discover the determination to overcome life's obstacles via discipline, community, and personal development. Furthermore, the narratives demonstrate how Arnis has a significant and life-changing impact on students' resilience and sense of self. Students who participate in disciplined training develop a sense of mastery and accomplishment that boosts their confidence. Thus, this builds a resilient mindset that they may apply to other aspects of their lives.

Sense of Community

Students emphasized the importance of the supportive environment in Arnis classes, which developed friendships and a sense of belonging. One participant said,

"In Arnis, we're all like a family. We support each other, and it makes a huge difference."

"The first time I stepped into the dojo, I was welcomed like family. My coach, whom I now call 'Tatay,' would often say, 'In Arnis, we stand together, just like we do in life.' Each training session reinforced my belief that I wasn't alone. With every strike and every defeat, my teammates cheered me on, and I learned that resilience is not just about bouncing back but also about leaning on others."

Another student who leads a school Arnis program, emphasizes the importance of community in developing resilience among students.

"When I trained, I didn't just practice moves; I shared my struggles with my teammates. They understood what I was going through. One night after training, we gathered to share stories and support one another. That sense of community gave me strength. It taught me that resilience is about confronting pain together, knowing you have a network of support."

"In our sessions, we emphasize not only technique but also building connections. We hold team-building activities where students express their fears and aspirations. When a student feels safe to share, they can confront their challenges with more courage. Witnessing my students grow closer and become more resilient has been the most rewarding part of teaching Arnis."

Through the stories, the importance of community in Arnis training is illustrated, emphasizing how the encouraging setting builds resilience and a sense of belonging. Students frequently highlight how Arnis classes foster a family-like environment where members are strongly bonded by support, respect, and common struggles.

With their coach, known as "Tatay," one student remarked that joining the dojo was like joining a family, reaffirming the value of unity in both martial arts and life. In addition to helping them develop their physical abilities, this support network gave them self-assurance and emotional strength. According to these narratives, Arnis' sense of community is essential to personal growth and extends beyond friendship. The relationships formed by common experiences and group support foster an atmosphere where students feel encouraged, respected, and equipped to conquer life's obstacles together.

Discussion

The results underscored the vital role of Arnis in fostering resilience. Quantitative data shows significant improvements in self-esteem and coping strategies among Arnis practitioners. These findings align with Moore et al. (2020) and Gonzales (2020), who highlight that physical activities, especially martial arts, can bolster psychological well-being by enhancing self-esteem and emotional regulation.

The qualitative narratives reveal how Arnis practitioners experience growth through discipline and communal support, suggesting that Arnis provides a holistic form of resilience training that integrates physical, emotional, and social elements. Participants frequently noted the sense of accomplishment from skill mastery, reinforcing the resilience framework by improving their self-efficacy and social support.

These findings suggest potential benefits for integrating Arnis into academic settings, where resilience is critical for student well-being and academic success.

The findings of this study underscore the significant positive impact of Arnis on students' resilience. The quantitative results demonstrate that students who practice Arnis exhibit higher self-esteem and better-coping strategies compared to their non-practicing peers. These results align with existing literature that stress the benefits of physical activity and martial arts in enhancing psychological well-being (Moore et al., 2020; Gonzales, 2020).

The qualitative narratives provide deeper insights into how Arnis training develops resilience. The development of coping mechanisms heightened self-esteem, and the formation of a supportive community are critical components that contribute to students' resilience. This suggests that Arnis not only serves as a physical activity but also as a vital tool for personal growth and emotional strength.

Incorporating Arnis into school curricula could provide students with essential skills to navigate the complexities of academic and personal life, ultimately developing a generation of resilient individuals.

Conclusion

The findings indicated that Arnis practitioners scored significantly higher on all three psychological criteria than non-practitioners. As to the self-esteem, the mean score for practitioners was 27.5 ($SD = 3.2$), while non-practitioners had a score of 22.8 ($SD = 4.1$). The t -value was 5.72, with a highly significant p -value ($<.001$). This implies that Arnis practitioners have much higher self-esteem than non-practitioners. This suggests that practicing Arnis may increase people's confidence and value, maybe due to the practice's social, mental, and physical components.

Furthermore, with a t-value of 6.21 and $p < .001$, practitioners scored 30.4 (SD = 4.5) on the coping strategies scale, whereas non-practitioners scored 24.1 (SD = 5.2). This showed that practitioners are better at handling stress and responding to changing conditions. Moreover, practitioners scored 31.2 (SD = 3.9) on the sense of community scale, which is significantly higher than non-practitioners' 25.5 (SD = 4.6) (t -value = 5.80, $p < .001$), indicating stronger social links and a sense of belonging. These findings demonstrated how playing Arnis has a positive psychological and social impact.

That being said, as per the quantitative data, the study demonstrated that Arnis, which is a traditional Filipino martial art, has a significant positive influence on students' resilience. Based on the result of the study, Arnis training promotes essential abilities such as improved coping mechanisms, increased self-esteem, and a strong feeling of community by incorporating physical, emotional, and social aspects. Likewise, it also suggested that playing Arnis has significant psychological and social benefits since the findings emphasized Arnis's numerous benefits as a tool for community development, cultural preservation, and personal growth, in addition to its use as a sport. Thus, students who participate in playing Arnis exhibit better resilience-related characteristics, indicating that it provides an important role in developing necessary psychological and social skills.

On the other hand, qualitative findings emphasized the importance that students have on discipline, communal support, and personal growth achieved through Arnis training. Participants emphasized how Arnis training helped them manage stress and adversity; their stories demonstrated the various ways to manage stress and develop resilience, emphasizing the social, emotional, and physical benefits of martial arts application.

Furthermore, participants indicated a sense of success after practicing Arnis skills, which increased their total self-worth, and their narratives demonstrated how Arnis has a major positive influence on students' resilience and sense of self.

Likewise, participants stressed the value of a supportive environment in Arnis training, which fostered friendships and a sense of belonging. Their experiences demonstrate the value of community in Arnis training, emphasizing how an encouraging environment fosters resilience and a sense of belonging. Participants frequently express how Arnis training established a sense of family in which participants are firmly connected through support, respect, and shared challenges.

These findings implied that adding martial arts, such as Arnis, into educational initiatives may help students develop resilience and cope better with academic and personal difficulties. In relations to this, future studies could look into the long-term resilience benefits of martial arts for various student groups.

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Bionote

Alonzo Lopez Mortejo holds a master's degree in Physical Education and Sports and a doctorate in Philosophy of Educational Leadership and Management, specializing in Physical Education. He has also completed diplomas in Sports and Exercise Nutrition, Sports Psychology, and Sports Concussion Management, reflecting his extensive academic and professional preparation in the field. Alonzo's scientific and professional interests include coffee, chess, cycling, resistance training exercises, and the innovation of sports equipment through 3D printing technology. He is passionate about designing and conducting fitness and sports programs for diverse populations, focusing on chess, resistance training, arnis, cycling, and other lifelong fitness activities. His work emphasizes promoting physical health, skill development, and well-being across all age groups and skill levels.

Ardo Okilanda is a passionate educator and sports enthusiast based in Depok, Indonesia. He studied Sports Coaching Education at Padang State University (UNP), where he developed a strong foundation in both sports and education. Currently serving as a lecturer at Padang State University since March 1, 2022, Ardo has been dedicated to shaping the future of sports education. Before his tenure at UNP, Ardo worked at PGRI University of Palembang from September 3, 2015, to December 2021, contributing to the academic community and helping guide students in their educational pursuits. His leadership skills were honed early in his career when he served as the General Chairperson of the South Sumatra Student Communication Forum from 2011 to 2013, where he led initiatives to empower and connect students across the region.